

## Mint of the United States at Philadelphia,

MELTING AND REFINING DEPARTMENT,

Philadelphia, 20<sup>th</sup> February, 1886.

Sir,

In reference to the letter of the Boston & Colorado Smelting Company, of the 15<sup>th</sup> Inst., I submit the following remarks. We have not changed our views as to the most desirable weights of bars of fine silver sent to this Mint. We have always objected to bars of 1900 oz. and even of 1500 oz., as too heavy to be conveniently handled by a workman, — as demanding more time and care in proportion to ~~their~~ weights than those of not more than 1200 oz. — and as attended with more risk of breaking the melting crucible, and consequent loss of precious metal.

When the proportion of heavy bars was much smaller than it is now, we endeavored to accommodate public depositors by receiving the heavy bars, but since the number recently received



(within a year or two) has increased, — and the business of melting silver bars in general has greatly expanded, it is requisite that we should adopt every expedient to facilitate and hasten the melting of silver bars. Since our whole plant, for melting, is best adapted to weights not exceeding 1200 oz., & since the melting of heavier bars is proportionally more wasteful of time, our duty is manifestly, either to diminish very much, or to abandon altogether the melting of heavy bars. We would greatly prefer the latter, for the interest and benefit of the Government.

The argument for melting heavy bars, used by the Boston and Col<sup>d</sup> Co., is certainly fallacious, viz. that Train-robbers cannot carry them off, because bars too heavy for robbers are certainly too heavy for our workmen, especially where they have to handle them deliberately over a nearly white heat.

The following table exhibits the usual weights of bars deposited by the several companies named :



## Mint of the United States at Philadelphia, (3)

MELTING AND REFINING DEPARTMENT,

Philadelphia, \_\_\_\_\_, 188—

The Omaha Co.	deposits bars of 1000 @ 1100 oz. weight.
" Penn <sup>a</sup> Lead "	" " 1000 @ 1100 " "
" Newark "	" " 1000 @ 1100 " "
" St. Louis "	" " 1100 @ 1200 " "
" Kansas " now "	" " 900 @ 1100 " "
" " " formerly "	" " 1100 @ 1400 " "
" Platt & Co "	" " 1200 @ 1800 " "
" Boston & Colorado "	" " 1800 @ 2000 " "

From the above list of the leading Smelting Companies, it is plain that  $\frac{5}{7}$  of them deposit bars just adapted to our plant, time & other circumstances, and further that one of them changed (the Kansas) its weights to the level of the first four companies, with<sup>out</sup> inconvenience, or complaint of cost.

My letter of 14. August 1885 is quoted as approving of large bars, because they can be opera—



ted on without difficulty where their diagonal does not exceed 8 inches in the thickness. It was simply a statement that a bar of more than 8 inches diagonal could not be pressed into a crucible, and did not touch the subject of the inconveniences and dangers of melting such large fine silver bars.

In regard to the vegetation on some fine silver bars, I will only observe that, while I know that it is one of the evidences of very fine silver, yet the sprouting may be, and sometimes is, so vigorous as to leave the surface pitted with hills and hollows, that might, through the merest accident, contain some little foreign matter, and that when the hills are levelled by hammering, this little foreign matter might be invisibly caught and weighed as silver. Altho' I have not found such matter after searching, yet, when I am held responsible for the weight, as so much silver, I am conscious of a trembling fear lest some of it should not be silver.



## Mint of the United States at Philadelphia,

MELTING AND REFINING DEPARTMENT,

Philadelphia, \_\_\_\_\_, 188—.

I trust that I have made the subject clear enough to show that there is sufficient ground to warrant a reduction of the weight of fine silver bars to 1000 @ 1200 oz.

Very respectfully,

J. C. Booth

M. &amp; R.

Hon. D. M. Fox

Superintendent.

Mint of the United States at Philadelphia,  
Melting and Refining Department,  
Philadelphia,  
February 20, 1886

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When the proportion of heavy bars was much smaller than it is now, we endeavored to accommodate public depositors by receiving the heavy bars, but since the number recently received (within a year or two) has increased, - and the business of melting silver bars in general has greatly expanded, it is requisite that we should adopt every expedient to facilitate and hasten the melting of silver bars. Since our whole plant, for melting, is best adapted to weights not exceeding 1200 oz., & since the melting of heavier bars is proportionally more wasteful of time, our duty is manifestly, either to diminish very much, or to abandon altogether the melting of heavy bars. We would greatly prefer the latter, for the interest and benefit of the Government.

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“ Platt & Co. “ “ “	1200 @ 1800 “ “
“ Boston & Colorado “ “	1800 @ 2000 “ “

From the above list of the leading Smelting Companies, it is plain that 5/7 of them deposit bars just adapted to our plant, time & other circumstances, and further that one of them changed (the Kansas) its weights to the level of the first four companies, without inconvenience, or complaint of cost.

My letter of 14 August 1885 is quoted as approving of large bars, because they can be operated on without difficulty where their diagonal does not exceed 8 inches in the thickness. It was simply a statement that a bar of more than 8 inches diagonal could not be pressed into a crucible, and did not touch the subject of the inconveniences and dangers of melting such large fine silver bars.

In regard to the vegetation on some fine-silver bars, I will only observe that, which I know that it is one of the evidence of very fine silver, yet the sprouting may be, and sometimes is, so vigorous as to leave the surface pitted with hills and hollows, that might, through the merest accident, contain some little foreign matter, and that when the hills are levelled by hammering, the little foreign matter might be invisibly caught and weighed as silver. Altho' I have not found such matter after searching, yet, when I am held responsible for the weight, as so much silver, I am conscious of a trembling fear lest some of it should not be silver.

I trust that I have made the subject dear enough to show that there is sufficient ground to warrant a reduction of the weight of fine silver bars to 1000 & 1200 oz.

Very respectfully,  
Jas. C. Booth  
M & R

Hon. D.M. Fox  
Superintendent.